

A case of extreme territorial behavior in *Acraea encedon* LINNÉ in Tanzania
von
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In mid September, 1977 I arrived at the outdoor restaurant of the New Africa Hotel in Dar es Salaam, Tanzania. The restaurant is enclosed by a low wall, the floor is made of concrete and apart from a few tall palms there was no vegetation inside the restaurant. A diagram of the lay-out is given in figure 1.

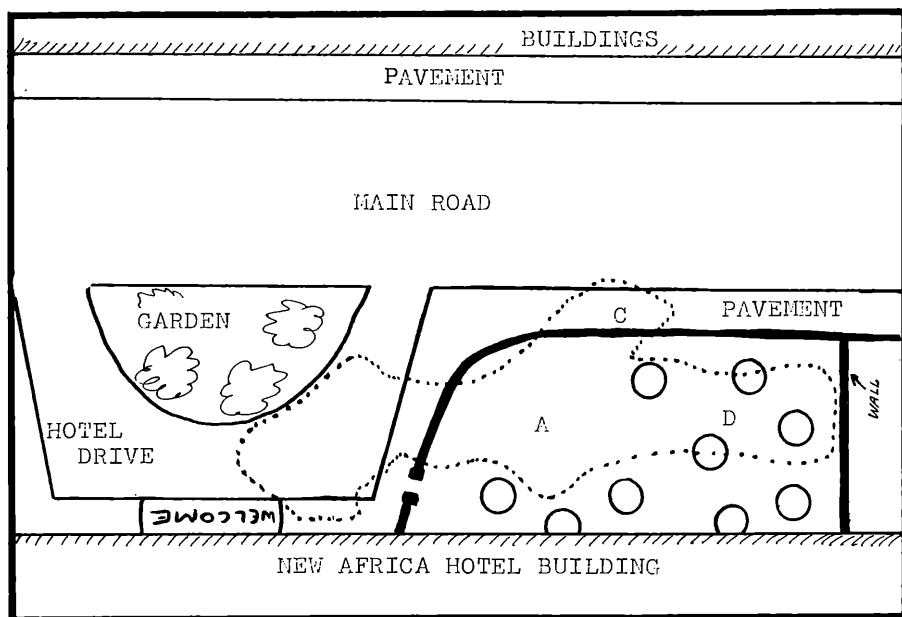


Fig. 1:

The lay-out of the restaurant of the New Africa Hotel in Dar es Salaam; the circles are restaurant tables. The butterfly spent 75 % of its time in area A, 10 in B, 10 in D, and 5 in C. Twice it moved out of the area covered by the dotted line on a brief excursion.

On my arrival at 13.00 I noticed that a single female of *Acraea encedon* LINNÉ was flying over the concrete, but I gave no thought to this rather unusual fact till I left again at about 13.30 and discovered that the butterfly was still there. I then decided to order another beer and to wait and to see what

would happen. To my surprise the butterfly remained in sight and continually flying for the next two and a half hours, till it disappeared when a strong wind blew up in conjunction with overcast skies. Admittedly this type of behaviour is the opposite of migration and displacement, but I still think an account will be of interest to the readers of *Atalanta* and all other entomologists.

On the day in question the weather was sunny and very pleasant for the season, with a mild breeze. During the two and a half hours of continual observation, the butterfly flew steadfastly in small circles about 50 to 100 cm above the concrete floor. Twice it climbed up the hotel facade to a height of five or six metres and twice it left the area shown on the map for a very brief period. It spent nearly 85 percent of all its time inside the low wall of the restaurant, and the number of customers moving through area A on the way to the exit did not bother it at all. Outside the wall it mostly flew in the hotel drive (B) where it was not disturbed by slow moving cars even though some actually bumped into it with the windscreen or the front grille.

During the two and a half hours of observation I did a complete mapping of the flight path and I would have been able to calculate precisely the distance flown and the number of circles made by the butterfly were it not for the fact that my notes were stolen together with all my personal papers. So I have had to make estimates instead, which are still fairly exact. The ground speed of the butterfly was a bit slower than normal walking pace, say about four km per hour. It flew without settling for at least two and a half hours, that is for 10.000 m or so. The average length of the circular or elliptical flight was 10 m, so more than 1000 completed circles were made.

Such extreme territorial behaviour must be linked somehow to sexuality, though it is decidedly odd that it should have taken place in a spot where there was no vegetation whatsoever and where no other butterfly was even seen. It could not have been an ovipositing flight since the butterfly never attempted to investigate any object. *A. encedon* is known to be quite a stationary butterfly (e.g. OWEN & CHANTER quoted in OWEN, D.F. 1971. *Tropical Butterflies*. Oxford University Press). But the case I observed was so extreme as to be positively un-nerving. Ten km of continuous flying within an area of 20 m²!

Anschrift des Verfassers:

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